Great Plains Applied Research Reservoir Study

Jeff Lucero and Berril Gold

FY 1998 - FY 1999

Traditionally, Reclamation has focused on water quantity as opposed to water quality issues at its reservoirs within the Great Plains Region. As such, Reclamation lacks a comprehensive data base of operational and water quality values for its reservoirs sufficient to make best informed management decisions relative to reservoir operations. With increasing public awareness of environmental issues, and consistent with provisions of the 1998 Clean Water Action Plan, it is incumbent upon Reclamation to initiate a water quality program within the region to position itself to support the nation's clean water and natural resource goals.

The objective of Phase I of the Great Plains Region Applied Research Reservoir Study was to develop and implement a water quality program for the 79 Reclamation reservoirs within the 9-state Great Plains Region. Fundamental to such an effort was the development of a comprehensive data base of operational and water quality values for each reservoir. It was the primary intent of this program, therefore, to first collect and organize existing data into spreadsheet form for all the Reclamation water impoundments within the region. Second, it was the purpose of this Phase I program to disseminate to Area Offices this information along with a report that characterized possible water quality changes involved with water impoundment and discussed measures available to counter such changes.

The culmination of the study was the delivery of the summary report entitled, "Great Plains Applied Research Reservoir Study - Phase I," September 30, 1999, to the Great Plains Region six Area Offices. The report explained the objectives of the program, briefly reviewed the nature of water quality changes that can result from water impoundment, and touched on mitigating measures available to counter water degradation. The report carried a spreadsheet that displayed an array of technical and operational information for all Reclamation reservoirs within the Great Plains region. Each Area Office had assisted in reviewing the data entered into the spreadsheet.

Great Plains Regional project researchers, contacts from Reclamation's Dakotas Area Office, the Kansas-Nebraska Area Office, the Wyoming Area Office, the Oklahoma-Texas Area Office, and the Eastern Colorado Area Office.

Great Plains Applied Research Reservoir Study - Phase I, September 30, 1999